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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/541,063

06/29/2005

Koji Utsugi

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07/22/2009

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EXAMINER

ENIN-OKUT, EDU E

ART UNIT

PAPER NUMBER

1795

MAIL DATE

DELIVERY MODE

07/22/2009

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/541,063	Applicant(s) UTSUGI ET AL.	
	Examiner Edu E. Enin-Okut	Art Unit 1795	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 11 May 2009.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-16 is/are pending in the application.
- 4a) Of the above claim(s) 1-12 and 14-16 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 13 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>6/29/05</u> . | 6) <input type="checkbox"/> Other: _____ |

ELECTROLYTE SOLUTION FOR SECONDARY BATTERY
AND SECONDARY BATTERY USING SAME

Detailed Action

1. The amendments filed on May 11, 2009 were received. Applicant has amended claim 13. (It is acknowledged that claims 1-12, 14, 15 and 16 were cancelled in applicant's response, filed on October 1, 2008, to a requirement for election/restriction. Currently, claim 13 is pending.)

2. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

Priority

3. As to applicant's contention that it is not responsible for the provision of certified copies foreign priority documents, Japanese Patent Application Nos. 2003-416516 and 2004-317301, upon review of MPEP 1893.03(c) and PCT Rule 17, the examiner acknowledges that applicant is not responsible for provision of copies of these documents if it has fully complied with PCT Rule 17.

Information Disclosure Statement

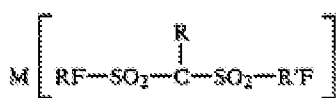
4. It is noted that the information disclosure statement (IDS) filed June 29, 2005 had failed to comply with the provisions of 37 CFR 1.97, 1.98 and MPEP § 609 at the time of the issuance of the Office Action dated December 11, 2008 because translations of foreign non-patent literature documents listed on the IDS were not on file. With the filing of its response to the above-described Office Action, applicant has submitted English translations of these documents which have subsequently been considered by the examiner. (*Please note:* Items lined-through on the IDS were previously considered.)

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Claim Rejections - 35 USC § 102

5. The rejection of claim 13 is rejected under 35 U.S.C. 102(b) as being anticipated by Armand (US 4,818,644) is maintained. The rejection is repeated below.

Regarding claim 13, Armand teaches an ionically conductive material composed of a salt represented by one of the following formulas in a liquid or solid solvent with applications to electrochemistry (Abstract, 1:7-51):



in which M is an alkali metal, alkaline earth metal, transition metal, or rare earth; RF and R'F, which are the same or different, each represents a perhalogenated, preferably perfluorinated group, having from 1 to 12 carbon atoms; and, R is hydrogen or an alkyl group having from 1 to 30 carbon atoms.

Armand teaches that the salt in solution in a liquid or solid solvent (e.g., aprotic solvents such as linear ethers such as diethyl ether, dimethoxyethane, or cyclic ethers such as tetrahydrofuran, dioxane, or dimethyltetrahydrofuran; esters such as methyl or ethyl formate, propylene or ethylene carbonate, or the butyrolactones; nitriles, acetonitriles, benzonitriles; nitrated derivatives such as nitromethane or nitrobenzene; amides such as dimethylformamide, diethylformamide, or N-methylpyrrolidone; and, sulfones such as dimethyl sulfone, tetramethylene sulfone, and other sulfolanes; and, polymers such as homopolymers or copolymers of ethylene oxide; polyphosphazenes; or imides) can be used as a liquid or solid electrolyte in an electrochemical generator, such as primary or secondary batteries (1:4-6, 1:52-67, 2:38-46). The salts have a high solubility in the solvents described above (1:67-68). The ionically conductive material includes the salt pursuant to one of the formula above, but it can also include a second salt or several other salts, provided that all of these salts have the same cation (2:9-13).

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Double Patenting

6. Claim 13 is provisionally rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1 and 12 of copending Application No. 10/582,855 is maintained. The rejection is repeated below.

Although the conflicting claims are not identical, they are not patentably distinct from each other because the instant application claims an electrolyte additive. The disclosure of the instant application differs from Application No. 10/582,855 in that the instant application does not teach the use of the additive in a secondary battery. However, it would have been obvious to one of ordinary skill in the art at the time of the invention to use the additive in a lithium secondary battery to improve its capacity retention ratio and suppress an increase of resistance during storage (see instant application disclosure, para. 32).

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

Response to Arguments

7. Applicant's arguments filed May 11, 2009 have been fully considered but they are not persuasive.

8. Applicant makes the following contention that,

“... claim 13 is amended to include the negative limitation "with the proviso that R₁ cannot be a hydrogen atom, when R₄ is an alkyl group having 1 to 5 carbon atoms, and R₄ cannot be a hydrogen atom, when R₁ is an alkyl group having 1 to 5 carbon atoms". This amendment excludes the compound (in col. 1, lines 7-51) in Armand relied upon by the Examiner in making this rejection. Therefore, the present amendment renders the rejection moot. ...”, (see p. 7-8 of its remarks).

It should be noted that the amendment described above does not exclude a structure where both R₁ and R₄ are hydrogen, and that Armand reference discloses such a structure, as discussed in the rejection of claim 13 above.

Conclusion

9. The following prior art made of record and not relied upon is considered pertinent to applicant's disclosure: Michot et al. (US 6,620,546) teaches ionic compositions having a high ionic conductivity comprising a salt with a delocalized anionic charge with use as an electrolyte in electrochemical devices, as catalyst of chemical reactions, or as photochemical or thermochemical initiator for polymerization or crosslinking reactions (Abstract).

10. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Contact Information

Any inquiry concerning this communication or earlier communications from the examiner should be directed to **Edu E. Enin-Okut** whose telephone number is **571-270-3075**. The examiner can normally be reached on Monday - Thursday, 7 a.m. to 3 p.m. (EST).

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Dah-Wei Yuan can be reached on 571-272-1295. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Edu E. Enin-Okut/
Examiner, Art Unit 1795

/Dah-Wei D. Yuan/
Supervisory Patent Examiner, Art Unit 1795